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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/008,348 | 11/08/2001 | Ioana Popa-Burke | 2104US | 3396 |
| 22881 | 7590 | 01/26/2005 | EXAMINER | |
| Icoria, Inc. 108 T.W. ALEXANDER DRIVE P O BOX 14528 RTP, NC 27709-4528 | | | GAKH. YELENA G | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1743 | |

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/008,348 | Applicant(s) POPA-BURKE ET AL. | |
| | Examiner Yelena G. Gakh, Ph.D. | Art Unit 1743 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment filed on 12/09/04 is acknowledged. Claims 26-41 are pending in the application.

Response to Amendment

2. Rejection of the pending claims is changed in light of the amendment and the Applicant's arguments.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 26-41** are rejected under 35 U.S.C. 102(b) as being anticipated by Calvert (1999 MDL User Conference) as evidenced by Hunter (J. Cell. Biochem. Suppl., 2001), Borman (C&EN, August 21, 2001) and Mettler-Toledo, Inc. (2001) (see MPEP § 2131.01: "To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill").

Calvert discloses RADICAL (Registration And Design Interface for Combinatorial and Array Libraries) for performing high-throughput and combinatorial methods, comprising an "automated balance program", which is in more details described by Hunter (page 23, right column): RADICAL "provides facile transfer of files to and from equipment such as **weighing**, QC and purification stations, and of course registration and screening processes". Vessels of

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multiwell plates comprise indices with information about vessels, as can be seen in the section "Plate Management".

As explained by Borman (page 52), "GlaxoSmithKline researchers [including Calvert, *Ex.*] are currently using the Smith Synthesizer from Personal Chemistry, Uppsala, Sweden, which permits precise control of reaction temperature and pressure and has a typical throughput of more than 10 reactions per hour. All library compounds produced at the Harlow center are analyzed for purity by liquid chromatography-mass spectrometry (LC/MS), using LCT with MUX technology from Micromass, Manchester, England. ... **Synthesis products are weighed utilizing an automated weighing station, the Bohdan Balance Automator.** After purity analysis, the results are imported into a custom designed computer system called RADICAL (the Registration And Design Interface for Combinatorial & Array Libraries). RADICAL also handles data regarding library design, reagent management, library synthesis, purification, quality control, and product registration in the corporate compound database, and it's used to communicate essential information about compounds to the high-throughout screening group". Mettler-Toledo, Inc. indicates that Bohdan Balance Automator "generates complete, error-free reports detailed sample I.D., rack number, position, **tare weight, gross weight and net weight.** The data is stored in a database". Thus, the weighing of a portion of a sample comprises weighing an empty vessel, dispensing the portion of the sample into the vessel and re-weighing the vessel to calculate a net weight. Robotic arm is transferring vessels from multiwell plate to the weighing device.

Therefore, Calvert discloses all particulars of the present invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claims 26-41** are rejected under 35 U.S.C. 103(a) as being unpatentable over a conventional method of weighing a portion of a sample.

Conventional method of weighing of a portion of a sample comprises weighing an empty vessel, dispensing a portion of the sample in the vessel, re-weighing the vessel with the portion and calculating a net weight of the portion by subtracting the weight of the empty vessel from the gross weight. It would have been obvious for any person of ordinary skill in the art to automate this process, since “to provide a mechanical or automatic means to replace manual activity which accomplishes the same result is within the skill of a routineer in the art”, *In re Venner*, 120 USPQ 192 (CCPA 1958). It would have been obvious to perform automated weighing for a plurality of samples in a plurality of vessels with indicia containing information about vessels, since this is the only possible way of storing information about a plurality of sample weights in computer. All steps of the method are obvious for any person of ordinary skill in the art, since they replicate manual weighing of a plurality of samples with obvious adapting of the manual process in automated environment.

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Response to Arguments

9. Applicant's arguments filed 12/09/04 have been fully considered but they are not persuasive.

Arguments regarding rejections under 35 U.S.C. 112, first and second paragraphs are not related to the amended claims and therefore are moot.

Regarding arguments related to the rejections over the prior art: the examiner is providing the reference of Calvert published in 1999; applying multiple references explaining 102b reference is completely legitimate and is in accordance with MPEP rules, as indicated in the present Office action. Therefore, the rejections over Calvert (1999) explained in details by multiple references are sustained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (571) 272-1257. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yelena G. Gakh
1/24/05

